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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/551,400

04/17/2000

Wataru Domon

ND-342US

1415

21254

7590

10/14/2003

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VIENNA, VA 22182-3817

EXAMINER

PIZARRO, RICARDO M

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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7590 07/30/2003
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EXAMINER

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DATE MAILED: 07/30/2003

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Office Action Summary

Application No.

09/551,400

Applicant(s)

DOMON, WATARU

Examiner

Ricardo M. Pizarro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3-5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claims 1-12 are objected to because of the following informalities and it is suggested to applicant:

In claim 1 line 8 insert “network” before -cycle-.

In claim 1 line 14 insert “local” before -cycle-.

In claim 1 line 17 insert “said” before -to-, in line 9 insert “as” before -prescribed-, in line 13 insert “ of said plurality of ” before -buses-, in line 17 insert “said” before -each-, delete “said” before the first occurrence of -the-, insert “plurality of” before -buses-.

In claim 2 line 9 insert “network” before -cycle-.

In claim 2 line 12 insert “local” before -cycle-

In claim 2 line 15 delete “of said”.

In claim 2 line 9 insert “as” before -prescribed-, in line 16 insert “other” before -nodes- and insert “said network” after -of-, in line 23 insert “ of said plurality of ” before -portals-.

In claim 4 line 5 replace “node” with -nodes-.

Claims 3, 5-12 are objected to due to their dependency.

Appropriate correction is required.

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Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over James in view of admitted prior art "Synchronizing Cycle master to external Timing information via Cycle slave". U.S. patent No. 6,389, 547 (James et al) discloses Method and apparatus to synchronize a bus bridge to a master clock including a network synchronization system for a network wherein a plurality of buses are connected in a tree-like configuration (e.g. Fig. 4 is characterized by the existence of only one route between any two nodes) by means of a bridge which has a plurality of portals each of which has a function of a node of the IEEE 1394 standards and to each of which a single bus which complies with the IEEE 1394 standard is connected comprising: a network clock reference node functioning as a reference clock source for the entire network and as a cycle master as prescribed in said standards, on of the portals included in said network being set as said network clock reference node (Prime portal 504 in Fig. 4 that is the clock reference for all other nodes on the bus, col 4 line50 , col 5 lines 7-12) and a local clock reference node provided for each of the other of said plurality of buses (secondary portals, col 4 lines 51-53) as in claim 1.

James did not specifically disclose said local clock reference node provided for each of the other of said plurality of buses than the bus to which said network clock reference node is connected and serving as a cycle master as prescribed in the IEEE standard 1394 standard for the bus to

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which said local clock reference node is not connected, one of the portals connected to said each of the other plurality of buses which has the least number of hops up to said network clock reference node being set as said local clock reference node, said local clock reference node including means for synchronizing a cycle frequency thereof with a cycle frequency of said network clock reference node , as in claim 1.

Admitted prior art "Synchronizing Cycle master to external Timing information via Cycle slave", Takashi Sato, January 1998, discloses a network synchronization system including a plurality of buses , discloses a local clock reference node provided for each of the other of said plurality of buses (e.g. nodes B,C,D, E in Page 12) than the bus to which said network clock reference node is connected and serving as a local cycle master (each node serving as cycle master prescribed in the IEEE standard 1394 standard for the bus to which said local clock reference node is not connected , e,g Local cycle master B is not connected to IEEE 1394 bus connection to Network cycle master A) , one of the portals connected to said each of the other plurality of buses which has the least number of hops up to said network clock reference node being set as said local clock reference node, said local clock reference node including means for synchronizing a cycle frequency thereof with a cycle frequency of said network clock reference node (e.g In Fig. 12 local cycle master B is the portal -not connected to said bus- with the least number of hops to the Network cycle master A , all local Cycle Masters B,C,D and E synchronized to Network Cycle Master A in Page 12), as in claim 1.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the selection of a cycle master node as disclosed by Admitted prior art "Synchronizing Cycle master to external Timing information via Cycle slave", Takashi Sato,

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January 1998 ,to the network system disclosed by James with the motivation of obtaining a digital bus system that has sufficient bandwidth resources to transfers and displays all the different types of data at the same time and that is not clogged with information other that information directly utilized and needed by its main processor.

Allowable Subject Matter

4. Claims 2-12 are objected to as under 37 USC 1.75 but would be allowable if rewritten to overcome objection to claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. patent no. 6,389,502 (Toguchi) discloses a Synchronous communication setting method in bus network.
- U.S. patent No. 6,408,355 (Toguchi) discloses a Method of releasing a isochronous transaction in a bus network.
- U.S. patent No. 6,445,711 (Scheel et al) discloses a Method of and apparatus of implementing and sending an asynchronous control mechanism packet used to control bridge devices of IEEE1394 buses.

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- U.S. patent No. 6,529,522 (Ito et al) discloses a Communication apparatus with digital interface.
- U.S. patent No. 6,522,649 (Staalkamp) discloses a Method of distributing video references signals.
- U.S. patent No. 6,539,450 (James et al) discloses a method for adjusting isochronous bandwidth on a bus.
- U.S. patent No. 6,584,539 (James et al) discloses a Method and sytem for message broadcast on a bus bridge interconnect .

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (703) 305-1121. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9314.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Douglas Olms**, can be reached on (703) 305-4703.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

July 23, 2003



Ricardo M. Pizarro